These rejections are respectfully traversed.

(1)

In rejecting a claim(s) under 35 USC 102, each positively recited step must be found in a single prior art reference. See, ***In re Bond***, 15 USPQ2d 1566 (Fed. Cir. 1990), Accordingly, for Kanemitsu et al to anticipate claims 1-6 and 8, it must disclose each and every positively recited step defined in these claims. It is respectfully submitted that it does not.

Claim 1 recites at least one step not found in Kanemitsu et al, namely, "forming the disc-shaped metal sheet to have.....a stepped portion..." The examiner refers to Fig. 4 of Kanemitsu et al. It has previously been noted, and is again repeated, that it is not disclosed how the shape of Fig. 4 of Kanemitsu et al was formed. Since the invention is cast in method format, it is essential for us to know how the shape of the embodiment shown in Fig. 4 of Kanemitsu et al was arrived at. Without this knowledge it cannot be assumed that it was derived in the same way as the stepped portion of the present invention.

Nor is this step insignificant. As also previously noted, the importance of the stepped portion cannot be overemphasized. It produces stability to the formation operation of the flange by increasing the ability of the blank sheet to withstand radial pressing forces applied to the outer periphery 15 as it is being formed into its various shapes and ultimately into the peripheral wall 21. A radial force applied to a flat sheet must be perfectly centered to achieve optimum resistance. With a stepped portion, it need not be. A range of off-centered loading is possible and still achieve optimum results. This is the advantage achieved with a stepped portion. It is for this reason that we must know how the embodiment of Fig. 4 of Kanemitsu et al is formed, but Kanemitsu et al does not tell us. We must conclude, therefore, that its formation is not like that

of the stepped portion according to the present invention.

(2)

The function of the stepped portion 1b of Ohya et al cannot be determined from a reading of Ohya et al. The reason for its formation cannot be determined. Therefore, it cannot be concluded that it serves the same purpose as does the stepped portion of the present invnetion.

To further distinguish the present invention over Ohya et al, claim 1 has been amended to define the formation of the swelling portion which is defined as connected to the outer periphery by the stepped portion, and that the outer periphery and the swelling portion lie in different planes. This is clearly understood by a reference to the drawings, for example. In addition, new claim 9 has been added which further defines the step of extending the swelling portion to the center line of the metal sheet. This too, is clearly shown in the drawings.

There can be no doubt that Ohya et al does not teach the formation of such a swelling portion and one with the extent of the swelling portion according to the present invention. Accordingly, claim 1 as further amended and claim 9 are believed to patentably distinguish over the art of record. Claims 2-6 and 8 depend from claim 1 and as such also patentably distinguish over the art of record.

In view of the foregoing, entry of the above amendments to the claims is respectfully requestd and claims 1-6, 8 and 9 found allowable.

Respectfully submitted,

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MARKED - UP COPY OF CLAIM 1 AS AMENDED

1. (Four Times Amended) A method of manufacturing an annular member from a disc-shaped metal sheet material defining an outer periphery, comprising the steps of:

forming the disc-shaped metal sheet to have a non-processed portion including the outer periphery and a stepped portion defined by an inclined wall, and an inner swelling portion connected to the outer periphery by the stepped portion, the outer periphery and the swelling portion lying in different planes;

rotating the disc-shaped metal material;

pressing the outer periphery of the metal sheet material in a radially inward direction, while continuing to rotate the metal sheet material;

thickening the outer periphery axially and without buckling by said pressing;

protruding the outer periphery to either side of the non-processed portion of the metal sheet material; and

forming a peripheral wall protruding to either side of the non-processed portion.